Notice of Allowability	Application No.	Applicant(s)
	10/739,458	SMITH, WALLACE F.
	Examiner	Art Unit
	Daniel Swerdlow	2646
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R	(OR REMAINS) CLOSED in or other appropriate commits (GHTS). This application is	n this application. If not included unication will be mailed in due course. THIS
1. This communication is responsive to <u>application filed 17 December 17 Decem</u>	<u>ecember 2003</u> .	
2. The allowed claim(s) is/are <u>1-31</u> .		
 3. ☐ Acknowledgment is made of a claim for foreign priority unallocation. a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Applicati	on No
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the deponsation of the deponsatio	son's Patent Drawing Revie s Amendment / Comment of .84(c)) should be written on the header according to 37 Cl sit of BIOLOGICAL MAT	or in the Office action of the drawings in the front (not the back) of FR 1.121(d). ERIAL must be submitted. Note the
 Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date	6. ☐ Interview S Paper No. 98), 7. ☐ Examiner's	nformal Patent Application (PTO-152) Summary (PTO-413), /Mail Date s Amendment/Comment s Statement of Reasons for Allowance

Application/Control Number: 10/739,458 Page 2
Art Unit: 2646 Attachment to PTOL-37

REASONS FOR ALLOWANCE

- 1. The following is an examiner's statement of reasons for allowance:
- Claim 1 claims measurement of signal transmission time through a network link 2. comprising measuring a minimum delay time between transmission of a test signal and transmission of an echo signal that causes an echo canceller bounding the link to cancel the echo signal and using that measured minimum delay to calculate the transmission time through the link. US Patent 5,521,907 to Ennis, Jr. et al., discloses a method of measuring travel time in communication network based on detecting a packet at two points in a data network and determining the time delay between the detections (Fig. 2; column 3, lines 5-19). US Patents 6,058,102 to Drysdale et al. and US Patent 6,831,890 to Goldsack et al. disclose similar methods. US Patent 5,450,394 to Gruber et al. discloses monitoring delay between network nodes using time stamped test cells and reporting test cells (Fig. 1, column 1, lines 4-40). US Patent 6,446,121 to Shah et al. discloses a similar method. US Patent 6,400,802 to Legare discloses testing of a network connection on which echo cancellers are active (Fig. 1, reference 118, 120; column 2, lines 1-3), but does not utilize the echo cancellers to calculate measurements. As such, the prior art does not disclose or suggest measurement of signal transmission time through a network link comprising measuring a minimum delay time between transmission of a test signal and transmission of an echo signal that causes an echo canceller bounding the link to cancel the echo signal and using that measured minimum delay to calculate the transmission time through the link, as claimed.
- 3. Claims 13 and 23 are essentially similar to Claim 1 and are allowable for the same reasons.

Page 3

Application/Control Number: 10/739,458

Art Unit: 2646

4. The remaining claims are allowable due to dependence from their respective base claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Swerdlow Examiner Art Unit 2646